



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,741	07/18/2000	Thomas M. Hartnett	SURMET-002PUS	8640

51503 7590 12/01/2011

RAYTHEON COMPANY  
c/o DALY, CROWLEY, MOFFORD & DURKEE, LLP  
354A TURNPIKE STREET  
SUITE 301A  
CANTON, MA 02021-2714

EXAMINER
----------

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

1741

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

12/01/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@dc-m.com  
amk@dc-m.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* THOMAS M. HARTNETT and  
JOSEPH M. WAHL

---

Appeal 2010-003537  
Application 09/618,741  
Technology Center 1700

---

Before CHUNG K. PAK, CATHERINE Q. TIMM, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

This is in response to a Request for Rehearing, filed September 19, 2011, for rehearing of our Decision, mailed September 1, 2011, where we sustained the Examiner's rejections (1) through (3) listed on pages 2-3 of the Decision.

In affirming the Examiner's rejection (1), we stated that while Maguire discloses in a preferred embodiment a method of making aluminum oxynitride using a two-step conversion process (i.e., a process involving two

different temperatures), Maguire discloses in a non-preferred embodiment (i.e., Maguire's claim 1) a method of making aluminum oxynitride in a single step (i.e., a process involving a single temperature). (Decision 6).

Appellants argue that the Board misapprehended or overlooked the fact that Maguire teaches forming aluminum oxynitride using only a two-step process (i.e., a process involving two different temperatures) and does not teach forming aluminum oxynitride using a single-step process (i.e., a process involving a single temperature) as required by independent claims 32, 34, 36, 38, 39, 41, 47, 53, 54, 58, 60, 76, 89, and 93. (Request 1-4). In that regard, Appellants argue that while Maguire's claim 1 states, in relevant part, "heating said chamber at a temperature," claim 1 of Maguire is not a measure of what Maguire discloses. *Id.* at 4. We agree with Appellants. It is well settled that "the scope of a patent's claims determines what infringes the patent; it is no measure of what it discloses." *In re Benno*, 768 F.2d 1340, 1346 (CCPA 1985). Upon reconsideration, Maguire's claim 1 cannot be relied upon as a measure of what Maguire discloses. It must be read in light of the Specification which only describes two different conditions and steps for forming aluminum nitride and aluminum oxynitride, respectively.

Moreover, we note that the Examiner does not direct us to any credible evidence or provide any persuasive explanation as to why it would have been obvious to employ a one-step process as required by the claims given that Maguire teaches only a two-step process.

Accordingly, we grant Appellants' request to modify our Decision regarding the Examiner's rejection (1). In so doing, we modify our Decision by reversing the Examiner's rejection (1).

With respect to rejection (2), the Examiner relies on the same factual

findings and determinations discussed above with regard to rejection (1). The Examiner does not provide any additional findings or explanation regarding how the additional reference (i.e., Dodds) would have satisfied the feature required by the claims.

Therefore, for the reasons stated above, we modify our Decision by reversing the Examiner's rejection (2).

With respect to rejection (3), Appellants argue that the Board misapprehended or overlooked that AAPA teaches a process that was known to Appellants and that AAPA does not teach that such process continuously converts alumina and carbon to aluminum nitride and then to aluminum oxynitride at the same temperature. (Request 1). Appellants argue that while AAPA teaches a two-step process, AAPA teaches that the second step uses a second, higher temperature. *Id.* at 5.

As stated at page 9 of our Decision, AAPA teaches converting alumina and carbon to aluminum nitride in a single reaction chamber to form aluminum nitride at a temperature in the range of 1650 to 1750°C and subsequently converting the formed aluminum nitride to aluminum oxynitride at a temperature in the range of 1750 to 1850°C. Thus, it can be inferred from AAPA that alumina and carbon can also be converted to an intermediate product (i.e., aluminum nitride) and a final product (i.e., aluminum oxynitride) at the same temperature (i.e., 1750°C) in a single reaction chamber.

In addition, with respect to Appellants' argument that the second step must be performed using a second, higher temperature, we note that Appellants have not directed us to any persuasive factual evidence supporting this argument. *See, e.g., In re Pearson*, 494 F.2d 1399, 1405

(CCPA 1974) (“Attorney's argument in a brief cannot take the place of evidence.”). As such, this argument unsupported by any objective evidence carries little weight.

Accordingly, the request for rehearing is granted to the extent that we have reconsidered our Decision but is denied as to the request to modify our Decision with respect to rejection (3).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1).

DENIED-IN-PART, GRANTED-IN-PART

bar